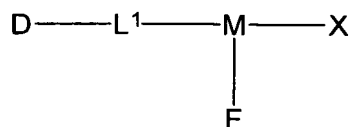


## Amendments to the Claims

Claim 1 (currently amended): A compound having the formula (I):



(I)

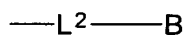
wherein:

D is a fluorescent dye selected from an acridone and a quinacridone dye;

F comprises a target bonding group selected from a carboxylic acid thioester group and a 1,2-aminothiol group;

M is a group adapted for attaching to F;

X is selected from hydrogen or the group:

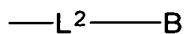


wherein B is an affinity tag; and

$\text{L}^1$  and  $\text{L}^2$  each independently ~~comprise~~ include a group containing from 1 – 40 linked atoms selected from carbon atoms which may optionally include one or more groups selected from  $-\text{NR}'-$ ,  $-\text{O}-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{CO}-\text{NH}-$  and phenylenyl groups, where  $\text{R}'$  is selected from hydrogen and  $\text{C}_1 - \text{C}_4$  alkyl.

Claim 2 (currently amended): ~~A compound according to~~ The compound of claim 1,

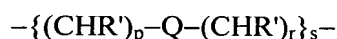
wherein X is the group:



~~wherein B and  $\text{L}^2$  are hereinbefore defined.~~

Claim 3 (currently amended): ~~A compound according to~~ The compound of claim 1, or claim 2 wherein each of L<sup>1</sup> and L<sup>2</sup> contains from 2 to 30 atoms.

Claim 4 (currently amended): ~~A compound according to~~ The compound of claim 1, or claim 2 wherein L<sup>1</sup> and L<sup>2</sup> are independently selected from the group:



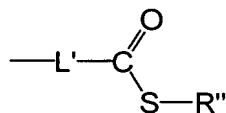
where Q is selected from the group consisting of: -CHR'-, -NR'-, -NR'-, -O-, -CH=CH-, -Ar- and -CO-NH-; R' is hydrogen or C<sub>1</sub> - C<sub>4</sub> alkyl, p is 0 - 5, r is 1 - 5 and s is 1 or 2.

Claim 5 (currently amended): ~~A compound according to~~ The compound of claim 4, wherein Q is selected from the group consisting of -CHR'-, -O- and -CO-NH-, where R' is hereinbefore defined.

Claim 6 (currently amended): ~~A compound according to any of claims 1 to 5~~ The compound of claim 1, wherein said affinity tag is selected from the group consisting of biotin and desthiobiotin.

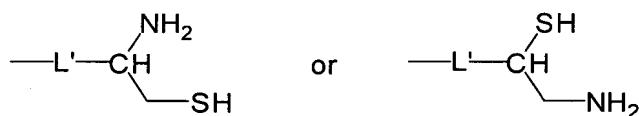
Claim 7 (currently amended): ~~A compound according to any of claims 1 to 5~~ The compound of claim 1, wherein said affinity tag is selected from the group consisting of his-tag, iminodiacetic acid and nitrilotriacetic acid.

Claim 8 (currently amended): ~~A compound according to any of claims 1 to 7~~ The compound of claim 1, wherein the target bonding group F is a carboxylic acid thioester of formula:



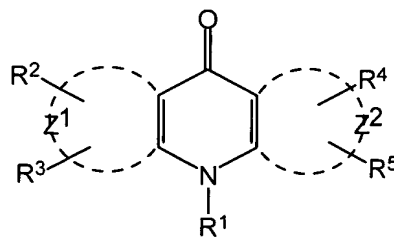
wherein L' is a bond or is a group containing from 1 – 30 linked atoms selected from the group consisting of carbon atoms and optionally carbon atoms including one or more groups selected from the group consisting of –NH–, –O– and –CO–NH–; and R'' is C<sub>1</sub> – C<sub>4</sub> alkyl, C<sub>6</sub> – C<sub>10</sub> aryl, or C<sub>7</sub> – C<sub>15</sub> aralkyl, which may be optionally substituted with sulphonate; or is the group –(CH<sub>2</sub>)<sub>2</sub>–CONH<sub>2</sub>.

Claim 9 (currently amended): ~~A compound according to any of claims 1 to 7~~ The compound of claim 1, wherein the target bonding group F is a 1,2-aminothiol group of formula:



wherein L' is ~~hereinbefore defined~~ a bond or is a group containing from 1 – 30 linked atoms selected from the group consisting of carbon atoms and carbon atoms including one or more groups selected from the group consisting of –NH–, –O– and –CO–NH–.

Claim 10 (currently amended): ~~A compound according to any of claims 1 to 9~~ The compound of claim 1, wherein the compound is an acridone dye having the formula (II):



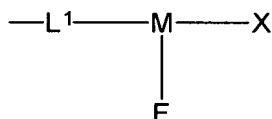
(II)

wherein:

groups  $R^2$  and  $R^3$  are attached to the  $Z^1$  ring structure and groups  $R^4$  and  $R^5$  are attached to the  $Z^2$  ring structure;

$Z^1$  and  $Z^2$  independently represent the atoms necessary to complete one ring or two fused ring aromatic or heteroaromatic systems, each ring having five or six atoms selected from carbon atoms and optionally no more than two atoms selected from oxygen, nitrogen and sulphur;

at least one of groups  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  is a group W having the formula:

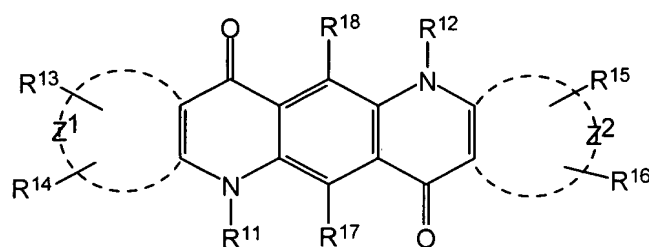


~~where F, M, X and  $L^+$  are hereinbefore defined;~~

when any of said groups  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  is not said group W, said remaining groups  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  are independently selected from the group consisting of hydrogen, halogen, amide, cyano, mono- or di- $C_1 - C_4$  alkyl-substituted amino, carbonyl, carboxyl,  $C_1 - C_6$  alkoxy, acrylate, vinyl, styryl, aryl, heteroaryl,  $C_1 - C_{20}$  alkyl, aralkyl, sulphonate, sulphonic acid, quaternary ammonium and the group  $-(CH_2)_n-Y_i$  and  $[[,]]$

when group  $R^1$  is not said group W, it is selected from the group consisting of hydrogen,  $C_1 - C_{20}$  alkyl, aralkyl and the group  $-(CH_2)_n-Y$ ; and  
 Y is selected from the group consisting of sulphonate, sulphate, phosphonate, phosphate, quaternary ammonium and carboxyl; and n is an integer from 1 to 6; provided that at least one of groups  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  is a water solubilising group.

Claim 11 (currently amended): ~~A compound according to any of claims 1 to 9~~ The compound of claim 1, wherein the compound is a quinacridone dye having the formula (III):



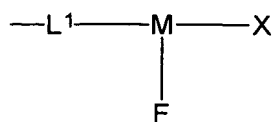
(III)

wherein:

groups  $R^{13}$  and  $R^{14}$  are attached to the  $Z^1$  ring structure and groups  $R^{15}$  and  $R^{16}$  are attached to the  $Z^2$  ring structure;

$Z^1$  and  $Z^2$  independently represent the atoms necessary to complete one ring or two fused ring aromatic or heteroaromatic systems, each ring having five or six atoms selected from carbon atoms and optionally no more than two atoms selected from oxygen, nitrogen and sulphur;

at least one of groups  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  and  $R^{18}$  is a group T having the formula:



where F, M, X and L<sup>1</sup> are hereinbefore defined;

when any of said groups R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> is not said group T, said remaining groups R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are independently selected from the group consisting of hydrogen, halogen, amide, cyano, mono- or di-C<sub>1</sub> – C<sub>4</sub> alkyl-substituted amino, carbonyl, carboxyl, C<sub>1</sub> – C<sub>6</sub> alkoxy, acrylate, vinyl, styryl, aryl, heteroaryl, C<sub>1</sub> – C<sub>20</sub> alkyl, aralkyl, sulphonate, sulphonic acid, quaternary ammonium and the group –(CH<sub>2</sub>)<sub>n</sub>–Y; and[[,]]

when either of groups R<sup>11</sup> and R<sup>12</sup> is not said group T, it is selected from the group consisting of hydrogen, C<sub>1</sub> – C<sub>20</sub> alkyl, aralkyl and the group –(CH<sub>2</sub>)<sub>n</sub>–Y;

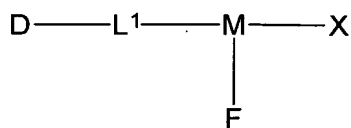
Y is selected from the group consisting of sulphonate, sulphate, phosphonate, phosphate, quaternary ammonium and carboxyl; and n is an integer from 1 to 6; provided that at least one of groups R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> is a water solubilising group.

Claim 12 (currently amended): ~~A compound according to~~ The compound of claim 10, or claim 11 wherein Z<sup>1</sup> and Z<sup>2</sup> are selected independently from the group consisting of phenyl, pyridinyl, naphthyl, quinolinyl and indolyl moieties.

Claim 13 (currently amended): ~~A compound according to~~ The compound of claim 10, or claim 11 wherein Z<sup>1</sup> and Z<sup>2</sup> are selected from phenyl and naphthyl moieties.

Claim 14 (currently amended): A method for labelling a protein of interest wherein said protein contains or is derivatised to contain an N-terminal cysteine, the method comprising:

- i) adding to a liquid containing said protein a compound of formula (I):



(I)

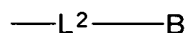
wherein:

D is a fluorescent dye selected from an acridone and a quinacridone dye;

F comprises a target bonding group selected from a carboxylic acid thioester group and a 1,2-aminothiol group;

M is a group adapted for attaching to F;

X is selected from hydrogen or the group:



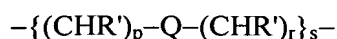
where B is an affinity tag; and

$\text{L}^1$  and  $\text{L}^2$  each independently ~~comprise~~ include a group containing from 1 – 40 linked atoms selected from carbon atoms and carbon atoms which ~~may optionally~~ include one or more groups selected from the group consisting of  $-\text{NR}'-$ ,  $-\text{O}-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{CO}-\text{NH}-$  and phenylenyl groups, where  $\text{R}'$  is selected from hydrogen and  $\text{C}_1 - \text{C}_4$  alkyl; and

- ii) incubating said compound with said protein under conditions suitable for labelling said protein.

Claim 15 (currently amended): ~~A compound according to~~ The method of claim 14, wherein each of L<sup>1</sup> and L<sup>2</sup> contains from 2 to 30 atoms.

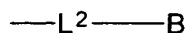
Claim 16 (currently amended): ~~A method according to~~ The method of claim 14, wherein L<sup>1</sup> and L<sup>2</sup> are independently selected from the group:



where Q is selected from the group consisting of: -CHR'-, -NR'-, -NR'-, -O-, -CH=CH-, -Ar- and -CO-NH-; R' is hydrogen or C<sub>1</sub> - C<sub>4</sub> alkyl, p is 0 - 5, r is 1 - 5 and s is 1 or 2.

Claim 17 (currently amended): ~~A method according to~~ The method of claim 16, wherein Q is selected from the group consisting of -CHR'-, -O- and -CO-NH-, where R' is hereinbefore defined.

Claim 18 (currently amended): ~~A method according to any of claims 14 to 17~~ The method of claim 14, wherein X is the group:



~~wherein B and L2 are hereinbefore defined,~~ said method further comprising separating and/or purifying the dye-labelled protein of interest by affinity chromatography.

Claim 19 (currently amended): ~~A method according to any of claims 14 to 18~~ The method of claim 14, wherein said protein of interest is selected from ~~antibody, antigen, protein, peptide~~ the group consisting of antibodies, antigens, proteins, peptides, microbial materials, cells and cell membranes.



Claim 20 (new): The compound of claim 11, wherein  $Z^1$  and  $Z^2$  are selected independently from the group consisting of phenyl, pyridinyl, naphthyl, quinolinyl and indolyl moieties.

Claim 21 (new): The compound of claim 11, wherein  $Z^1$  and  $Z^2$  are selected from phenyl and naphthyl moieties.